

ROBLD3 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13338c**Specification**

ROBLD3 Antibody (Center) - Product Information

Application	WB, IHC-P,E
Primary Accession	O9Y2Q5
Other Accession	O3T132 , NP_054736.1
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	13508
Antigen Region	41-70

ROBLD3 Antibody (Center) - Additional Information**Gene ID** 28956**Other Names**

Ragulator complex protein LAMTOR2, Endosomal adaptor protein p14, Late endosomal/lysosomal Mp1-interacting protein, Late endosomal/lysosomal adaptor and MAPK and MTOR activator 2, Mitogen-activated protein-binding protein-interacting protein, MAPBP-interacting protein, Roadblock domain-containing protein 3, LAMTOR2, MAPBPIP, ROBLD3

Target/Specificity

This ROBLD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 41-70 amino acids from the Central region of human ROBLD3.

Dilution

WB~~1:1000
IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ROBLD3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ROBLD3 Antibody (Center) - Protein Information

Name LAMTOR2 ([HGNC:29796](#))

Synonyms MAPBPIP, ROBLD3

Function As part of the Ragulator complex it is involved in amino acid sensing and activation of mTORC1, a signaling complex promoting cell growth in response to growth factors, energy levels, and amino acids (PubMed:[20381137](#), PubMed:[29123114](#), PubMed:[29158492](#), PubMed:[29107538](#), PubMed:[28935770](#)). Activated by amino acids through a mechanism involving the lysosomal V-ATPase, the Ragulator plays a dual role for the small GTPases Rag (RagA/RRAGA, RagB/RRAGB, RagC/RRAGC and/or RagD/RRAGD): it (1) acts as a guanine nucleotide exchange factor (GEF), activating the small GTPases Rag and (2) mediates recruitment of Rag GTPases to the lysosome membrane (PubMed:[22980980](#), PubMed:[30181260](#), PubMed:[29123114](#), PubMed:[29158492](#), PubMed:[29107538](#), PubMed:[28935770](#)). Activated Ragulator and Rag GTPases function as a scaffold recruiting mTORC1 to lysosomes where it is in turn activated (PubMed:[22980980](#), PubMed:[29123114](#), PubMed:[29158492](#), PubMed:[29107538](#)). Adapter protein that enhances the efficiency of the MAP kinase cascade facilitating the activation of MAPK2 (By similarity).

Cellular Location

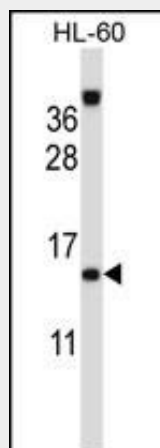
Late endosome membrane {ECO:0000250|UniProtKB:Q9JHS3}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JHS3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9JHS3}. Lysosome membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9JHS3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q9JHS3}. Note=Recruited to lysosome and endosome membranes by LAMTOR1. {ECO:0000250|UniProtKB:Q9JHS3}

ROBLD3 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

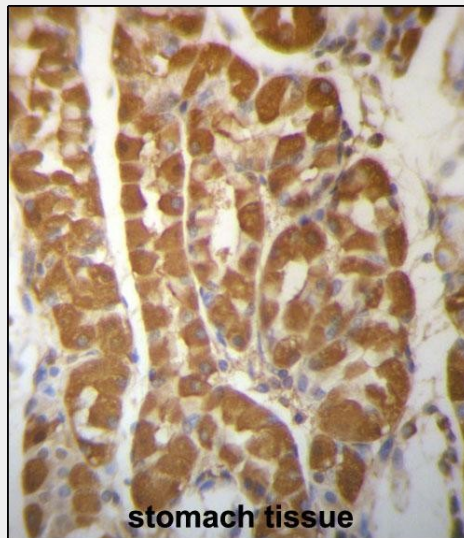
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ROBLD3 Antibody (Center) - Images



ROBLD3 Antibody (Center) (Cat. #AP13338c) western blot analysis in HL-60 cell line lysates

(35ug/lane). This demonstrates the ROBLD3 antibody detected the ROBLD3 protein (arrow).



ROBLD3 Antibody (Center) (Cat. #AP13338c) immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of ROBLD3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

ROBLD3 Antibody (Center) - Background

The product of this gene is highly conserved with a mouse protein associated with the cytoplasmic face of late endosomes and lysosomes. The mouse protein interacts with MAPK scaffold protein 1, a component of the mitogen-activated protein kinase pathway. In humans, a mutation in this gene has been associated with a primary immunodeficiency syndrome, and suggests a role for this protein in endosomal biogenesis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

ROBLD3 Antibody (Center) - References

Sancak, Y., et al. Cell 141(2):290-303(2010)
Wunderlich, W., et al. J. Cell Biol. 152(4):765-776(2001)